

Appl. No. 09/806,047
Amdmt. Dated June 14, 2004
Reply to Office Action of March 16, 2004

REMARKS

Claims 1-19 are pending in the present application. Claims 1-19 stand rejected. Claims 1, 10, and 11 have been amended to recite a more preferred embodiment of the present invention. Claims 1, 10, and 11 have been amended to add "wherein the elastic laminate exhibits elasticity without mechanical stretching." Support for this amendment is found at page 1, line 26 to page 2, line 27 of the specification.

Claim 20 is new. Support for this claim may be found in the disclosure at page 6, lines 28 to page 17 line 5 of the specification.

It is believed that these changes do not involve introduction of new matter; thus, entry of these changes is believed to be in order and is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Applicants respectfully submit that the Office has failed to make a *prima facie* case for the obviousness rejections presented below. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. *See In re Frisch*, 972 F.2d 1260 (Fed. Cir. 1992); MPEP § 2143.01. Second, there must be a reasonable expectation of success. *In re Yaeck*, 947 F.2d 488 (Fed. Cir. 1991); MPEP § 2143.02. Third, the prior art reference or combined references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. Furthermore, in establishing a *prima facie* case of obviousness, case law clearly places the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103." *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967).

Claims 1-8 and 10-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Gompel et al. (U.S. Patent No. 4,940,464) (hereafter "Van Gompel") in view of Haffner et al. (U.S. Patent No. 5,789,065) (hereafter "Haffner"). The Office states that "Van Gompel discloses a disposable pant-like garment for absorbing human discharge and comprises an absorbent assembly comprising a liquid-imperious outer cover, liquid pervious liner, and an absorbent core contained there between." The Office mentions that the disclosed garment includes side panels that are stretchable and that can be made of stretch bonded laminate, which generally comprises an elastic layer disposed between an outer and inner nonwoven layer. The Office concedes that Van Gompel fails to teach that the "nonwoven layers have preferred fiber orientation" and that Van Gompel fails to teach Applicants' claimed elastomer.

The Office states that Haffner teaches "a sandwiched fabric composite made of nonwoven, elastic material, and nonwoven." The Office states that the nonwovens of Haffner

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have fibers oriented in a general direction for the purpose of providing strength to the end laminate. The Office further states that Haffner's "sandwiched fabric can be used in personal care products as side tabs or ears on diapers or childcare training pants." The Office concludes that "it would have been obvious for one of ordinary skill at the time the invention was made to have replaced the stretchbonded laminate employed by Van Gompel with the sandwiched fabric composite of Haffner." Applicants respectfully traverse this rejection.

Van Gompel teaches the subject matter as described by the Office including a pant-like garment for absorbing human discharge comprising side panels that are stretchable and that can be made of a stretch bonded laminate, which generally comprises an elastic layer disposed between two nonwoven layers. Haffner discloses a transversely stretchable elastic laminate made by a two-step process. *See Abstract*. In the first step, Haffner discloses continuously extruding an elastomer sheet between two sheets of fabric. *See Abstract*. The sheets of fabric preferably comprise an unnekked nonwoven material. Col. 6, line 2. Haffner discloses that, for added strength of the end laminate, one or both sheets can have fibers oriented in a generally uniform direction or even in a random direction. Col. 9, lines 20-25. Haffner teaches that the elastomer sheet is preferably formed by extruding an elastomeric polymer through a die. Col. 9, lines 49-51. In the second step, Haffner teaches that the resulting inelastic laminate is necked under elevated temperatures. Col. 12, lines 47-51. The laminate is necked to reduce its width; heating allows the elastic sheet to soften and lose its elastic memory. Col. 12, lines 53-56. The resulting laminate of Haffner has desirable cross directional elasticity. Col. 12, lines 58-59.

The Office proposes a hypothetical combination of Van Gompel and Haffner. The Office asserts that the stretchbonded laminate side panels in the disposable pant-like garment of Van Gompel maybe replaced with the sandwiched fabric composite of Haffner. Even assuming *arguendo*, Applicants assert that this proposed hypothetical combination fails to teach or disclose Applicants' claimed invention.

Applicants submit that the Office has failed to establish a *prima facie* case of obviousness and, as a result, Claims 1-8 and 10-19 should be allowed as currently amended. Applicants point to several errors in the Office's asserted *prima facie* case of obviousness.

Claims 1, 10, and 11. Regarding Claims 1, 10, and 11, the Office has made at least two errors in regard to its asserted *prima facie* case of obviousness. First, the Office has failed to consider the cited references in their entirety including the teachings away from Applicants' claimed invention. Case law states that, "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Haffner discloses that "an inelastic laminate was made by continuously extruding an elastomer sheet between two plies of a fibrous sheet." *See Abstract*. All of the Examples disclosed in Haffner are likewise inelastic after

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lamination of the fabric to the elastomer. Col. 15, line 25 and Col. 18, line 22. The inelastic laminate is subsequently heated and necked, which presumably imparts cross-directional elasticity. See Abstract and Col. 12, lines 11-59. Regarding Claims 1, 10, and 11 as amended, Applicants claim an elastomeric laminate exhibiting elasticity without the need for mechanical stretching during formation. Haffner clearly teaches away from this limitation since stretching (e.g., necking) is required to impart elasticity to the laminate. One of ordinary skill in the art would recognize that the elastic laminate fabric of Haffner must undergo heating and necking to impart elasticity. Applicants' claimed invention explicitly requires that elasticity be exhibited in the laminate without the need for mechanical stretching. The Office has failed to make its *prima facie* case of obviousness with regard to claims 1, 10, and 11 by not considering Haffner's teaching away from Applicants' claimed invention as amended.

Second, the Office's proposed hypothetical combination (*i.e.*, using the elastic laminate fabric of Haffner in the side panels of the disposable pant-like garment of Van Gompel) fails to teach or suggest every claim limitation as presented by Applicants. With regard to Claim 1, 10, and 11, the proposed hypothetical combination fails to teach or suggest Applicants' limitation that the elastic laminate exhibits elasticity without mechanical stretching. As discussed above, the elastic laminate fabric of Haffner requires heating and stretching to impart elasticity to the laminate. As a result, all of Applicants' claim limitations have not been taught or suggested.

Claims 1, 4, 10, 11, and 16 Regarding Claims 1, 4, 10, 11, and 16, the Office's proposed hypothetical combination fails to teach Applicants' claimed Fiber Orientation Ratio. The Office states the fibers of Haffner are oriented in a general direction. The Office further states that "[r]egarding claims 1, 4, 10, 11, and 16, the claimed fiber orientation ratios are all inherent given that Van Gompel et al and Haffner et al teach a garment using a nonwoven having fibers arranged in a preferred direction." Haffner states that the "for added strength of the end laminate . . . fibers [are] oriented in a generally uniform direction, or even a random direction." Col 9, lines 20-23. The Fiber Orientation Ratio is clearly not explicitly taught or suggested.

In regard to the Office's assertion of inherency, the doctrine of inherency has no place in the determination of obviousness. Case law has held: "That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown." *In re Spormann*, 363 F.2d 444, 448 (CCPA 1966). Haffner fails to disclose or suggest a Fiber Orientation Ratio. Furthermore, Haffner fails provide any teaching or suggestion beyond the bare reference to "fibers oriented in a generally uniform direction." Case law states, "[C]onsistent with the public policy underlying our patent law, that before any publication can amount to a statutory bar to the grant of a patent, its disclosure must be such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention." *In re Le Grice*, 49 C.C.P.A. 1124, 1134 (CCPA 1962). Applicants assert that one would not be

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able to combine the bare reference of "fibers oriented in a generally uniform direction or even in a random direction" and the knowledge of the particular art to result in Applicants' claimed invention having a Fiber Orientation Ratio. Support for this assertion is found in the ambiguity present in the Haffner disclosure of "fibers oriented in a generally uniform direction or even in a random direction." First, "generally uniform" is indefinite and provides no guidance as to relative direction of fiber orientation or to the number of fibers so oriented. Second, the disclosure ultimately teaches nothing to one of ordinary skill in the art. Applicants fails to see how this how this common sense notion that something is either random or not random can even suggest the Applicants' clearly quantified Fiber Orientation Ratio. Case law clearly places the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103." *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967). The Office has failed to produce a factual basis for the rejection.

Even assuming that the doctrine of inherency is applicable in this determination of obviousness, the Office has inappropriately applied the doctrine in this rejection. "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Roberston*, 196 F.3d 743, 745 (Fed. Cir. 1999); MPEP §2112. Haffner states that the "for added strength of the end laminate . . . fibers [are] oriented in a generally uniform direction, or even a random direction." The Office asserts that Applicants' claimed Fiber Orientation Ratio is inherent in light of the Haffner disclosure that the fibers oriented in a generally uniform or random direction. However, there is nothing to indicate that fibers having a generally uniform direction will necessarily results in Applicants' Fiber Orientation Ratio. One reason why Haffner's fibers with generally uniform direct do not necessarily result in Applicant's Fiber Orientation Ratio is because the term "generally uniform direction" is ambiguous. Applicants assert that one of ordinary skill in the art would be unable to discern when fibers are oriented in a "generally uniform direction." When considering the context in which "generally uniform direction" is used, the term could be read to mean anything not in a random direction. Ultimately, Haffner's fibers having a "generally uniform direction" do not necessarily result in the fibers having a Fiber Orientation Ratio of as recited in Claims 1, 4, 10, 11, and 16.

Likewise, Claims 2-9 and 12-19 depending therefrom and containing all limitations of Claim 1 or 10 are also nonobvious. See *In re Fine*, 837 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Claims 2 and 14 With regard to Claims 2 and 14, the Office states, while Applicants' claimed Tensile Strength Ratio are not explicitly taught by Van Gompel and Haffner, "it is reasonable to presume that said limitation would be met by the combination of the two references." The Office states that support may be found in "the use of similar materials (i.e. elastic nonwoven sandwiched in between two non-elastic nonwovens made having a preferred

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fiber direction) and in similar production steps (i.e. lamination of said elastic nonwoven in between two non-elastic nonwoven layers)." However, the references, alone or in combination, fail to teach or suggest Applicants' Tensile Strength Ratio. Case law states that the suggestion or motivation to modify or combine the reference teachings along with a reasonable expectation of success must be found in the prior art and not in Applicants' disclosure. See *In re Dow Chemical Co.*, 837 F.2d 469 (Fed. Cir. 1988). Initially, it is important to clarify what the Tensile Strength Ratio (TSR) represents. On page 8, lines 9-22, the TSR is defined as the tensile strength of the nonwoven layer at the breaking point in the primary fiber direction divided by the tensile strength of the nonwoven layer at the breaking point in the perpendicular direction. Claims 2 and 14 each state that the TSR is at least about 15. In light of the definition, a TSR of 15 means that the tensile strength in the primary fiber direction is 15 times stronger than the tensile strength in the direction perpendicular to the primary fiber direction. Van Gompel fails to teach or suggest such a ratio or fiber direction. Haffner does state that "the sheets can, for added strength of the end laminate . . . have fibers oriented in a generally uniform direction, or even a random direction," but the quoted language does not explicitly teach the ratio.

The support offered by the Office is directed to "the use of similar materials." By arguing that similar materials will yield similar results, the Office is essentially arguing inherency. However, as discussed above, the doctrine of inherency has no place in the determination of obviousness. See *In re Spormann*, 363 F.2d at 448. Even assuming that the doctrine of inherency is applicable in this determination of obviousness, the Office has inappropriately applied the doctrine in this rejection. "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Roberston*, 196 F.3d 743, 745 (Fed. Cir. 1999); MPEP §2112. There is nothing to indicate that Haffner's fibers having a generally uniform direction will necessarily result in Applicants' claimed nonwoven having a Tensile Strength Ratio of at least about 15. Haffner discloses that fibers oriented in a generally uniform direction or in a random direction can add strength to the end laminate. Col. 9, lines 20-23. Haffner does not disclose in what direction strength is being added. Without this teaching, Haffner cannot suggest the Tensile Strength Ratio since the direction of strength increase is by definition important in achieving a TSR greater than 15. As a result, it is mere conjecture to hold that Haffner teaches a nonwoven having a tensile strength in the primary fiber direction 15 times stronger than the tensile strength in the direction perpendicular to the primary fiber direction. Case law clearly places the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103." *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967). The Office, by asserting a presumption, has failed in its initial burden to produce a factual basis for the rejection.

Claims 3 and 15 With regard to Claims 3 and 15, the Office states that while Applicants'

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claimed stress at 30% elongation is not explicitly taught by Van Gompel and Haffner "it is reasonable to presume that said limitations would be met by the combination of the two references." The support the Office offers for such a presumption is directed to "the use of similar materials." By arguing that similar materials will yield similar results, the Office is essentially arguing inherency. However, as discussed above, the doctrine of inherency has no place in the determination of obviousness. See *In re Spormann*, 363 F.2d at 448. Even assuming that the doctrine of inherency is applicable in this determination of obviousness, the Office has inappropriately applied the doctrine of inherency in this rejection. "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Roberston*, 196 F.3d 743, 745 (Fed. Cir. 1999); MPEP §2112. There is nothing to indicate that Haffner's fibers having a generally uniform direction will necessarily result in Applicants' claimed nonwoven having a stress of less than about 200 gf/inch at 30% elongation. Applicants are claiming a relatively high elongation at a low loading. Conversely, Haffner proclaims that improved strength results in the end laminate. Haffner does not disclose or suggest that its nonwoven has a relatively low strength in the direction perpendicular to the primary fiber direction. Case law clearly places the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103." *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967). The Office, by asserting a presumption, has failed in its initial burden to produce a factual basis for the rejection. Accordingly, this rejection is improper and should be withdrawn.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Gompel in view of Haffner and further in view of Mormon (U.S. Patent No. 5,114,781) (hereafter "Mormon"). Applicants believe the Office has mistakenly directed this rejection to Claim 6. Claim 5 appears to be the rejected claim since Claim 5 and not Claim 6 recites basis weight. The Office concedes that Van Gompel and Haffner fail to teach the claimed basis weight of the non-elastic nonwoven. The Office states that Mormon teaches a composite elastic material having at least one elastic sheet and at least one reversibly necked material joined to the elastic sheet. The reversibly necked material can be a spunbond or meltblown nonwoven having a basis weight of 0.2-8.0 osy (6.8-339.0 g/m²). The Office concludes that it would have been obvious to one of ordinary skill to have used the nonwoven basis weight as disclosed by Mormon for the nonwoven disclosed by Van Gompel and Haffner. Applicants respectfully traverse this rejection.

Mormon, as the Office states, teaches a composite elastic material having at least one elastic sheet and at least one reversibly necked material. The reversibly necked material can be a spunbond or meltblown nonwoven having a basis weight of 0.2-8.0 osy (6.8-339.0 g/m²). Claim 5 is dependent from Claim 1, which has been shown to be nonobvious in light of the arguments presented above. As a result, Claim 5 depending from and containing all limitations of Claim 1 is

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likewise nonobvious. *See In re Fine*, 837 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Since the teachings of Mormon do not make up for the shortcomings of the primary references, this rejection is improper and should be withdrawn.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Gompel in view of Haffner and further in view of Dean et al. (U.S. Patent No. 6,231,976) (hereinafter "Dean"). The Office concedes that Van Gompel and Haffner fail to teach that the fibers in the non-elastic nonwoven are bicomponent fibers. The Office states that Dean teaches that bicomponent binder fibers can be used to make nonwovens eliminating the need for a separate adhesive. Applicants respectfully traverse this rejection.

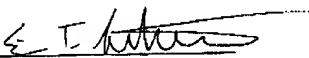
Dean discloses the use of binder fibers made from copolyesters. Dean discloses that the resulting copolyesters have excellent thermoplastic flow and bonding capability. However, Claim 9 is dependent from Claim 1, which has been shown to be nonobvious in light of the arguments presented above. As a result, Claim 9 depending from and containing all limitations of Claim 1 is likewise nonobvious. *See In re Fine*, 837 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Since the teachings of Dean do not make up for the shortcomings of the primary references, this rejection is improper and should be withdrawn.

CONCLUSION

Based on the foregoing reasons, Applicants respectfully submit that the Office has not made a *prima facie* case of obviousness and the rejections are therefore improper. Reconsideration and withdrawal of the rejections are respectfully requested. Allowance of each of the pending claims in the next Office Action is respectfully requested.

Respectfully Submitted,

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